Attachment

SITE-WIDE ENVIRONMENTAL ASSESSMENT FOR THE NATIONAL RENEWABLE LABORATORY SOUTH TABLE MOUNTAIN SITE

SITE BACKGROUND AND DESCRIPTION

The National Renewable Energy Laboratory (NREL) is one of ten Department of Energy (DOE) national laboratories and is dedicated to the research, development, and deployment of renewable energy and energy efficiency technologies. The DOE Solar Energy Research Institute, founded in 1977, achieved national laboratory status and became NREL in 1991. The Midwest Research Institute and their subcontractors, Battelle Memorial Institute and Bechtel Corporation, operate NREL for DOE. The laboratory is comprised of three main sites: 1) South Table Mountain (STM); 2) Denver West Office Park (DWOP); and 3) The National Wind Technology Center (NWTC). The STM and DWOP sites are the subjects of this scoping notice as the NWTC has been reviewed under a separate NEPA process that was conducted earlier this year.

The 327-acre STM site is located on the southeast side of South Table Mountain, north of Interstate 70 and west of the Interstate 70 and Denver West Boulevard interchange in unincorporated Jefferson County, near Golden, Colorado. (See Figures 1 and 2) Only a portion of the site, 136 acres, is available for development. A total of 177 acres is protected by a conservation easement, and development on the remaining 14 acres is restricted by utility easements. The community of Pleasant View is adjacent to the southern border of the STM site. The STM site includes acreage on the South Table Mountain mesa top, slope, and toe, and was formerly part of the Colorado National Guard facility at Camp George West. There are currently six laboratories, a few small test facilities, and several support buildings on the site (See Figure 3). NREL conducts research activities in support of the following DOE research programs:

- Solar
- Geothermal
- Distributed Energy, Electrical Infrastructure and Reliability
- Biomass
- Industrial Technology
- Freedom Car and Vehicle Technology
- Hydrogen and Infrastructure
- Buildings
- Weatherizations and Intergovernmental Grants
- Federal Energy Management
- Other DOE Sponsored Programs
- Work for Others Supporting the DOE Mission

The DWOP site also is in the vicinity of the Interstate 70-Denver West Boulevard interchange near Golden, Colorado. DOE and NREL occupy three buildings located at the eastern end of the office complex and one building located north of Interstate 70 just east of the STM site. The DWOP provides administrative offices and space for limited laboratory activity. Figure 2 presents a larger scale map showing the boundaries and local setting of these sites.

PURPOSE AND NEED

A Site-Wide EA for the STM and the 3 buildings at the eastern end of the DWOP was prepared in 1993. In accordance with DOE NEPA implementing regulations (10 CFR section 1021.330), DOE is required to evaluate existing Site-Wide EAs periodically to determine whether they adequately address current agency plans, functions, programs and resource utilization. Based on current program priorities, applicable regulatory processes, and new research and development proposals, DOE has determined that a new comprehensive EA should be prepared for these sites at this time.

This Site-Wide EA will provide an opportunity to review the collective potential effects of existing and proposed facilities and operations at the STM and DWOP sites. The purpose and need for the Proposed Action is to operate the sites with new and improved capability to support DOE's mission to research and develop renewable energy and energy efficiency technologies.

PROPOSED ACTION AND ALTERNATIVES

The following presents a summary of the current Proposed Action and No Action alternative descriptions. Other alternatives raised during the scoping period will be considered and may be addressed in the EA if they are consistent with the Proposed Action purpose and need.

Proposed Action

The Proposed Action is to continue operation of the STM and DWOP sites for alternative energy research with new and improved capability. New construction would include permanent physical improvements to the sites that involve buildings and equipment, utilities and other infrastructure. The Proposed Action also consists of expanded activities not requiring new permanent facilities or infrastructure, including research programs, facility operations, management practices and maintenance activities.

The components of the Proposed Action are addressed according to two implementation periods:

Short-Term (2003-2007)
Long-Term (2008-2022)

Federal budgeting decisions and fluctuating priorities will determine which components of the proposed actions are selected for funding and implementation. Thus, the specific physical requirements and locations of proposed facilities as well as their actual construction schedules are uncertain for most short-term and long-term components. In many cases, the descriptions of the improvements will be in general terms and the locations and schedules for components will be estimated based on currently available information. If implemented, these potential scenarios could change to involve more or less development. Therefore, the EA will use a "bounding analysis" approach to consider the full range of possible development scenarios.

Short-Term Components (2003-2007)

The Short-Term improvement program includes components for both the STM site and the DWOP site, but most of the physical improvements will occur at the STM site. The following improvements define the short-term components of the Proposed Action:

Construction of New and Modification of Existing Facilities

- Facility for expanded photovoltaic research and technology development
- Laboratories for plant biotechnology and research greenhouses
- Biorefinery pilot-scale facility
- Facilities for whole building testing, integrated building/transportation energy systems, and office and laboratory space
- Relocation of staff and program implementation to and/or from DWOP and STM
- Facility for large vehicle test research
- Laboratory facilities for expanded fundamental hydrogen research
- Facility for larger scale hydrogen process development and integration
- Additional space for computing facility
- Visitor's Center Expansion
- Research Support Facilities
- Modification of Existing Facilities

Infrastructure Modifications and Improvements

- Electrical infrastructure
- Telecommunications infrastructure
- Domestic water system, including gray water system improvements
- Fire protection system
- Sewage system
- On-site roads, parking areas, and site entrances
- Additional alternative fueling stations
- Security infrastructure

Currently, approximately 1100 employees are located at the STM and DWOP sites. Historically, increases in staffing have typically been 2 to 3 percent annually. Using the bounding analysis approach, the EA will consider the potential impact of the facilities based on the projected capacity of the sites with the anticipated additions and improvements.

Long-Term Components (2008-2022)

Long-Term improvements are envisioned to take place beyond the Short-Term (2003-2007) time frame. More assumptions and fewer details are provided for the Long-Term components, because implementation of these long-term actions is less certain than implementation of the Short-Term actions. A bounding analysis approach will be used to consider the full range of possible development scenarios.

No Action

The No Action Alternative would leave the site in its current configuration, add no new facilities, and maintain current levels of research, operation and management activities. Therefore, the existing site and activities provide the baseline condition for the environmental impact analysis.

ENVIRONMENTAL TOPICS TO BE ADDRESSED

The proposed EA will address primary, direct, indirect, secondary and cumulative impacts of the Proposed Action and alternatives. Beneficial and adverse, on-site and off-site, construction, demolition, and operation and maintenance impacts will be discussed, as appropriate. The environmental topics to be discussed in the EA include:

Land Use, Planning, Socioeconomics and Public Policy
Traffic and Circulation
Air Quality and Noise
Visual Quality/Aesthetics
Water Resources
Soils and Geology
Biological Resources
Cultural Resources
Waste Management
Public Facilities, Services and Utilities
Energy

SCHEDULE

The schedule for key milestones to complete the NEPA review process is:

Close of Scoping Period	May 15, 2002
Public Distribution of the Draft EA	October 2002

No formal public scoping meeting is currently planned for this project. This letter and the draft EA, when it is available, will be posted on the Golden Field Office electronic reading room at http://www.golden.doe.gov.

Please direct written and oral comments to:

Steve Blazek
NEPA Compliance Officer
DOE Golden Field Office
1617 Cole Boulevard
Golden, CO 80401-3393
(303) 275-4723
(303) 275- 4788 (fax)
steve_blazek@nrel.gov

FIGURES:

Figure 1 Regional Location Map, South Table Mountain Site
Figure 2 Local Setting Map, South Table Mountain Site
Figure 3 Site Plan, South Table Mountain Site